

## *Annual Drinking Water Quality Report*

### Piney Creek Corporation, Water System (PWSID MDO 17-0021)

July 1, 2010

**We're pleased to present the 2009 Annual Drinking Water Quality Report** This report is designed to inform Swan Cove Lane residents about the quality of water and services we deliver every day. Our goal is to provide a safe and dependable supply of drinking water.

**The source of our drinking water** is one well drilled into the Aquia aquifer, which lies about 210 feet beneath the ground. The Aquia is an underground layer of porous sand saturated with water and confined on the top and bottom by impervious layers of clay through which we pump water directly into our distribution system. Water in this aquifer is continuously replenished by surface water percolating through porous soils in southern Kent County and northern Queen Anne's County. As the water moves through the porous soils, it is purified while at the same time it dissolves minerals such as iron, calcium, etc., from the soils.

A **source water** assessment was performed by Maryland Department of the Environment (MDE). This assessment outlines the potential sources of contamination for our raw water supply. The final report was issued in the spring of 2010. The susceptibility analysis for Piney Creek Corporation's water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. **Piney Creek Corporation's water supply is not susceptible to contaminants originating at the land surface** due to the protected nature of confined aquifer, except for microbiological contaminants due to the location of the supply well in an area subject to tidal flooding.

The Corporation's drinking water meets Federal and State standards. The following report is in compliance with Federal EPA regulations and is provided annually to the consumer. This report outlines the quality of our drinking water and what that quality means. The Corporation contracted with Ken Shupe to operate and maintain our water system. We also monitor the quality of water we distribute to the consumer following guidelines established by Federal and State regulations.

If you have any questions about this report or the water utility, please contact Shelia Cernak, Secretary (410) 643-6040.

**Piney Creek Corporation routinely monitors for contaminants in your drinking water according to Federal and State laws.** The table on the following page shows required monitoring results for January 1 to December 31, 2009, and non-required contaminants from 2009 for your information. Bacteria are monitored monthly at specific locations throughout the distribution system. A permanent chlorine disinfection system was added in October of 2004 to correct ongoing positive bacteria test results and there were no positive bacteria test results in 2009. In 2009 we had one violation for failing to mail a copy of the results of lead and copper testing to the Maryland Department of the Environment (MDE) by January 10, 2010 as required, but we were in compliance by January 28, 2010 when it was received by MDE. Note that the testing was done timely, and the results compiled by Chesapeake Environmental Labs were provided to us but not to MDE, an oversight on our part.

**All sources of drinking water are subject to potential contamination** by substances that are naturally occurring or manmade. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily indicate that the drinking water poses a health risk. The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep our water at or below the levels specified by law as being safe for consumption. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Piney Creek Corporation is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

#### **Definitions**

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions (continued on page 2):

Non-Detects (ND) -laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) -one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) -one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level -the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements a water system must follow. P/A Indicates Presence or Absence of contaminants

Maximum Contaminant Level- The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. If contaminant level is exceeded, that triggers action on the part of provider (action level- see above).

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Pico Curie per Liter (pCi/L) Unit of measurement for radioactivity

#### Detected contaminants NOT in violation of the Maximum Contamination Level

CONTAMINANT	VIOLATION	LEVEL DETECTED	UNIT OF MEASUREMENT	MCL	MCLG	DATE OF SAMPLE	LIKELY SOURCE OF CONTAMINATION
Copper	N	.286	mg/L	1.3	NA	Dec09	Erosion of natural deposits.
Lead	N	.01	mg/L	.015	NA	Dec09	Erosion of natural deposits
Total Trihalomethanes	N	2.34	Ug/L	100/80	NA	June09	By product of drinking water disinfection
Haloacetic Acids	N	1.29	Ug/L	60	NA	June09	By product of drinking water disinfection

**Detection of these substances** in the drinking water does not constitute a known threat to public health because they were found only at levels less than the MCL and below the level that EPA currently feels may constitute a health threat. MCLs are set at very stringent levels, and Piney Creek's water has proved to be below those levels for the contaminants listed above. While your drinking water meets EPA's standards, it did periodically contain total coliform.

**Some people may be more vulnerable to contaminants** in the drinking water than the general population. Immuno-compromised persons, such as those people with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPNCDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.